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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/777,556	02/05/2001	Richard A. Barry	SYCS-008	8971

959 7590 11/30/2005

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EXAMINER	
LI, SHI K	

ART UNIT	PAPER NUMBER
2633	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/777,556	BARRY ET AL.	
	Examiner	Art Unit	
	Shi K. Li	2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *20 July 2005 and 16 September 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 20 July 2005 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 6-14, 22 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nielsen et al. (U.S. Patent 6,559,988 B1) in view of Milton et al. (U.S. Patent 6,084,694).

Regarding claim 1, Nielsen et al. discloses in FIG. 1 a drop device 100 wherein a plurality of selected wavelengths are dropped. Wavelengths that are not dropped are passed through the drop device. The difference between Nielsen et al. and the claimed invention is that Nielsen et al. does not teach the concept of wavelength bands wherein a band constitutes a group of contiguous wavelengths. Milton et al. teaches in FIG. 2a and FIG. 2b that wavelengths are divided into bands each of which constitutes four contiguous wavelengths. "Band of wavelengths" is a logical concept for conveniently describing wavelengths of a WDM system. The drop device of Nielsen et al. works the same way as the claimed invention regardless of the

dividing of wavelengths into bands. One of ordinary skill in the art would have been motivated to combine the teaching of Milton et al. with the drop device of Nielsen et al. to describe the drop device of Nielsen et al. as dropping selected wavelengths from different bands because it provides interoperability with other systems. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to describe the drop device of Nielsen et al. as dropping selected wavelengths from different bands, as taught by Milton et al., because it provides interoperability with other systems.

Regarding claim 10, it is obvious to one of ordinary skill in the art to arrange the filters of Nielsen et al. in a circuit pack so that it can be installed in a rack suitable to be deployed in the field.

Regarding claim 11, Nielsen et al. teaches in col. 2, line 35 thin film filters.

Regarding claim 22, Nielsen et al. teaches in FIG. 2 an add device 200. The difference between Nielsen et al. and the claimed invention is that Nielsen et al. does not teach the concept of wavelength bands wherein a band constitutes a group of contiguous wavelengths. Milton et al. teaches in FIG. 2a and FIG. 2b that wavelengths are divided into bands each of which constitutes four contiguous wavelengths. "Band of wavelengths" is a logical concept for conveniently describing wavelengths of a WDM system. The add device of Nielsen et al. works the same way as the claimed invention regardless of the dividing of wavelengths into bands. One of ordinary skill in the art would have been motivated to combine the teaching of Milton et al. with the add device of Nielsen et al. to describe the add device of Nielsen et al. as adding selected wavelengths from different bands because it provides interoperability with other systems. Thus it would have been obvious to one of ordinary skill in the art at the time the

invention was made to describe the add device of Nielsen et al. as adding selected wavelengths from different bands, as taught by Milton et al., because it provides interoperability with other systems.

Regarding claims 6-9, 12-14 and 26-29, the dividing wavelengths into bands are arbitrary and the add/drop wavelengths are determined by the filters. For example, if we divide the wavelengths such that band A consists of $\lambda 1$ and $\lambda 2$, band B consists of $\lambda 3$ and $\lambda 4$, band C consists of $\lambda 5$ and $\lambda 6$, and band D consists of $\lambda 7$ and $\lambda 6$, Nielsen et al. teaches to drop/add one wavelength from each of bands A, B, C and D. If we divide the wavelengths such that band E consists of $\lambda 1$-$\lambda 4$, and band F consists of $\lambda 5$-$\lambda 8$, Nielsen et al. teaches to drop/add two wavelengths from each of bands E and F. If we divide the wavelengths such that band G consist of $\lambda 1$-$\lambda 6$, and band H consists of $\lambda 7$-$\lambda 12$, Nielsen et al. teaches to drop/add one wavelength from band H and a plurality of wavelength from band H. If is also obvious for one of ordinary skill in the art to use filters of various wavelengths in the modified add/drop device of Nielsen et al. and Milton et al., for example filters with wavelengths $\lambda 1$, $\lambda 7$, $\lambda 11$ and $\lambda 15$, or any other combinations.

4. Claims 1, 6-10 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Milton et al. (U.S. Patent 6,084,694) in view of Farries (U.S. Patent 6,201,907 B1).

Regarding claim 1, Milton et al. discloses in FIG. 1 a WDM network comprising a plurality of nodes. Milton et al. teaches in FIGs. 2 and 3 the concept of wavelengths bands and the structure of an optical node. Milton teaches in col. 5 lines 23-25 to drop and add channels from different bands. The difference between Milton et al. and the claimed invention is that Milton et al. suggests dropping a whole band of channels. Farries teaches in FIG. 7 that in

certain applications only selected channels from each band need to be dropped. This gives flexibility in assigning wavelengths to optical paths among a large number of nodes in a complex network. One of ordinary skill in the art would have been motivated to combine the teaching of Farries with the optical node of Milton et al. to only drop selected wavelength channels from a plurality of bands because this approach eliminates unnecessary equipment and reduces loss. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to drop only selected channels from a plurality of bands, as taught by Farries, in the optical node of Milton et al. to only drop selected wavelength channels from a plurality of bands because this eliminates unnecessary equipment and reduces loss.

Regarding claims 6-9, the dividing wavelengths into bands are arbitrary and the add/drop wavelengths are determined by the filters. For example, if each band consists of three channels, i.e., λ_1-λ_3 constitute band A, λ_4-λ_6 constitute band B, λ_7-λ_9 constitute band C, and λ_{10}-λ_{12} constitute band D Farries teaches in FIG. 7 a fixed wavelength set comprises one wavelength from each band. If each band consists of five channels, i.e., λ_1-λ_5 constitute band E, λ_6-λ_{10} constitute band F, and λ_{11}-λ_{15} constitute band G, Farries also teaches in FIG. 7 a fixed wavelength set comprises a first wavelength from band F and a plurality of wavelengths from band E. If each band consists of 7 channels, i.e., λ_1-λ_7 constitute a first band and λ_7-λ_{14} constitute a second band, Farries teaches in FIG. 7 a fixed wavelength set comprises two wavelengths from each band. Farries also teaches in FIG. 7 a fix wavelength set comprises multiple wavelengths from a plurality of bands. It is also obvious for one of ordinary skill in the art to use filters of various wavelengths in the modified add/drop device of Milton et al. and Farries, e.g., filters with wavelengths λ1, λ7, λ11 and λ15, or any other combinations.

Regarding claim 10, it is obvious to one of ordinary skill in the art to arrange the filters of Farries in a circuit pack so that it can be installed in a rack suitable to be deployed in the field.

Regarding claim 12, if each band consists of four channels, i.e., λ_1-λ_4 constitute band A, λ_5-λ_8 constitute band B and λ_9-λ_{12} constitute band C, Farries teaches in FIG. 7 to drop λ_1 from band A and λ_8 from band B.

Regarding claims 13-14, if each band consists of 8 channels, i.e., λ_1-λ_7 constitute a first band and λ_8-λ_{14} constitute a second band, Farries teaches in FIG. 7 to drop λ_1 and λ_4 from the first band and drop λ_8 and λ_{14} from the second band.

5. Claims 2-3, 23-24 and 39-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nielsen et al. and Milton et al. as applied to claims 1, 6-14, 22 and 26-29 above, and further in view of Koehler (U.S. Patent 6,426,815 B1).

Nielsen et al. and Milton et al. have been discussed above in regard to claims 1, 6-14, 22 and 26-29. Regarding claims 2-3, 23-24 and 39-40, the difference between Nielsen et al. and Milton et al. and the claimed invention is that Nielsen et al. and Milton et al. do not teach to predetermine the set of wavelengths prior to installation. However, there are networks that have fixed predetermined wavelength. For example, Koehler teaches in FIG. 6 a network with four nodes 820, 840 860 and 880. Koehler teaches to drop λ1 and λ12 for node 820, λ2 and λ11 for node 840, λ3 and λ10 for node 860, and λ4 and λ9 for node 880. Since the wavelengths are predetermined, one of ordinary skill in the art would have been motivated to assign the wavelength prior to the installation of the filter in the network. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to assign fixed set of

wavelengths prior to installation of the filter in networks such as those taught by Koehler because the wavelength assignment is fixed and there is no need to change.

Regarding claims 41-44, the dividing wavelengths into bands are arbitrary and the add/drop wavelengths are determined by the filters. For example, if we divide the wavelengths such that band A consists of $\lambda 1$ and $\lambda 2$, band B consists of $\lambda 3$ and $\lambda 4$, band C consists of $\lambda 5$ and $\lambda 6$, and band D consists of $\lambda 7$ and $\lambda 6$, Nielsen et al. teaches to drop/add one wavelength from each of bands A, B, C and D. If we divide the wavelengths such that band E consists of $\lambda 1$-$\lambda 4$, and band F consists of $\lambda 5$-$\lambda 8$, Nielsen et al. teaches to drop/add two wavelengths from each of bands E and F. If we divide the wavelengths such that band G consist of $\lambda 1$-$\lambda 6$, and band H consists of $\lambda 7$-$\lambda 12$, Nielsen et al. teaches to drop/add one wavelength from band H and a plurality of wavelength from band H. If is also obvious for one of ordinary skill in the art to use filters of various wavelengths in the modified add/drop device of Nielsen et al., Milton et al. and Koehler, for example filters with wavelengths $\lambda 1$, $\lambda 7$, $\lambda 11$ and $\lambda 15$, or any other combinations.

6. Claims 4-5 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nielsen et al., Milton et al. and Koehler as applied to claims 2-3, 23-24 and 39-44 above, and further in view of Hutchison et al. (U.S. Patent 6,687,463 B1).

Nielsen et al., Milton et al. and Koehler have been discussed above in regard to claims 2-3, 23-24 and 39-44. Regarding claims 4 and 25, the difference between Nielsen et al., Milton et al. and Koehler and the claimed invention is that Nielsen et al., Milton et al. and Koehler do not teach extra wavelengths for future growth. Hutchison et al. suggests in col. 1, line 34 that if extra-unused wavelengths are provided initially, future growth can be achieved without interruption. One of ordinary skill in the art would have been motivated to combine the teaching

of Hutchison et al. with the modified add/drop device of Nielsen et al., Milton et al. and Koehler because providing extra-unused wavelength allows future growth to be achieved smoothly without interruption of service. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide extra unused wavelength channels initially, as suggested by Hutchison et al., in the modified add/drop device of Nielsen et al., Milton et al. and Koehler because providing extra unused wavelength allows future growth to be achieved smoothly without interruption of service.

Regarding claim 5, Nielsen et al. teaches in col. 2, line 35 thin film filters and Milton et al. teaches in col. 6, lines 1-2 that a node includes receiver for converting optical signal to electrical signal.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Milton et al. and Farries as applied to claims 1, 6-10 and 12-14 above, and further in view of Scridhar (U.S. Patent 5,778,118).

Milton et al. and Farries have been discussed above in regard to claims 1, 6-10 and 12-14. The difference between Milton et al. and Farries and the claimed invention is that Milton et al. and Farries do not teach thin film filter. However, it is well known in the art that Brag grating filters and thin film filters are equivalent for separating wavelength channels from WDM system. For example, Scridhar teaches in col. 5, lines 28-29 that thin film filters can be used in place of Bragg filters. Where the claimed differences involve the substitution of interchangeable or replaceable equivalents and the reason for the selection of one equivalent for another was not to solve an existent problem, such substitution has been judicially determined to have been obvious. See In re Ruff, 118, USPQ 343 (CCPA 1958). Therefore, it would have been obvious to one of

ordinary skill in the art at the time of the invention to replace Bragg grating filters with thin film filters.

8. Claims 15-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Milton et al. and Farries as applied to claims 1, 6-10 and 12-14 above, and further in view of Koehler (U.S. Patent 6,426,815 B1).

Milton et al. and Farries have been discussed above in regard to claims 1, 6-10 and 12-14. The difference between Nielsen et al. and Milton et al. and the claimed invention is that Milton et al. and Farries do not teach to predetermine the set of wavelengths prior to installation. However, there are networks that have fixed predetermined wavelength. For example, Koehler teaches in FIG. 6 a network with four nodes 820, 840 860 and 880. Koehler teaches to drop $\lambda 1$ and $\lambda 12$ for node 820, $\lambda 2$ and $\lambda 11$ for node 840, $\lambda 3$ and $\lambda 10$ for node 860, and $\lambda 4$ and $\lambda 9$ for node 880. Since the wavelengths are predetermined, one of ordinary skill in the art would have been motivated to assign the wavelength prior to the installation of the filter in the network. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to assign fixed set of wavelengths prior to installation of the filter in networks such as those taught by Koehler because the wavelength assignment is fixed and there is no need to change.

Regarding claims 16-17, the combination of Milton et al. and Farries teaches drop channels and express (pass-through) channels.

Regarding claims 18-21, the combination of Milton et al. and Farries teaches that any channels can be selected from any bands by including filters with reflecting-band corresponding to the wavelengths of the channels.

9. Claims 30 and 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nielsen et al. and Milton et al. as applied to claims 1, 6-14, 22 and 26-29 above, and further in view of Scridhar (U.S. Patent 5,778,118).

Nielsen et al. and Milton et al. have been discussed above in regard to claims 1, 6-14, 22 and 26-29. Nielsen et al. teaches in col. 8, lines 25-26 that FIG. 1 and FIG. 2 may be used in combination to both add signal to and remove signals from a WDM network. Nielsen et al. gives an example in FIG. 3. However, FIG. 3 of Nielsen et al. may not add/drop the same set of wavelengths. Scridhar teaches in FIG. 1 a configuration for add/drop the same set of wavelengths. One of ordinary skill in the art would have been motivated to combine the teaching of Scridhar with the modified add/drop device of Nielsen et al. and Milton et al. because it is common to add/drop the same set of wavelength in a node to reuse wavelengths so that the number of channels in a WDM system can be minimized and simplifies the design of the network. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to add/drop the same set of wavelengths, as taught by Scridhar, in the modified add/drop device of Nielsen et al. and Milton et al. because it is common to add/drop the same set of wavelength in a node to reuse wavelengths so that the number of channels in a WDM system can be minimized and simplifies the design of the network.

Regarding claims 35-38, the dividing wavelengths into bands are arbitrary and the add/drop wavelengths are determined by the filters. For example, if we divide the wavelengths such that band A consists of $\lambda 1$ and $\lambda 2$, band B consists of $\lambda 3$ and $\lambda 4$, band C consists of $\lambda 5$ and $\lambda 6$, and band D consists of $\lambda 7$ and $\lambda 6$, Nielsen et al. teaches to drop/add one wavelength from each of bands A, B, C and D. If we divide the wavelengths such that band E consists of $\lambda 1$-$\lambda 4$,

and band F consists of λ5-λ8, Nielsen et al. teaches to drop/add two wavelengths from each of bands E and F. If we divide the wavelengths such that band G consist of λ1-λ6, and band H consists of λ7-λ12, Nielsen et al. teaches to drop/add one wavelength from band H and a plurality of wavelength from band H. If is also obvious for one of ordinary skill in the art to use filters of various wavelengths in the modified add/drop device of Nielsen et al., Milton et al., Scridhar, Koehler and Hutchison et al., for example filters with wavelengths λ1, λ7, λ11 and λ15, or any other combinations.

10. Claims 31-32 and 45-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nielsen et al., Milton et al. and Scridhar as applied to claims 30 and 35-38 above, and further in view of Koehler (U.S. Patent 6,426,815 B1).

Nielsen et al., Milton et al. and Scridhar have been discussed above in regard to claims 30 and 35-38. The difference between Nielsen et al., Milton et al. and Scridhar and the claimed invention is that Nielsen et al., Milton et al. and Scridhar do not teach to predetermine the set of wavelengths prior to installation. However, there are networks that have fixed predetermined wavelength. For example, Koehler teaches in FIG. 6 a network with four nodes 820, 840 860 and 880. Koehler teaches to drop λ1 and λ12 for node 820, λ2 and λ11 for node 840, λ3 and λ10 for node 860, and λ4 and λ9 for node 880. Since the wavelengths are predetermined, one of ordinary skill in the art would have been motivated to assign the wavelength prior to the installation of the filter in the network. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to assign fixed set of wavelengths prior to installation of the filter in networks such as those taught by Koehler because the wavelength assignment is fixed and there is no need to change.

11. Claims 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nielsen et al., Milton et al., Scridhar and Koehler as applied to claim 31-32 above, and further in view of Hutchison et al. (U.S. Patent 6,687,463 B1).

Nielsen et al., Milton et al., Scridhar and Koehler have been discussed above in regard to claims 31-32. The difference between Nielsen et al., Milton et al., Scridhar and Koehler and the claimed invention is that Nielsen et al., Milton et al., Scridhar and Koehler do not teach extra wavelengths for future growth. Hutchison et al. suggests in col. 1, line 34 that if extra-unused wavelengths are provided initially, future growth can be achieved without interruption. One of ordinary skill in the art would have been motivated to combine the teaching of Hutchison et al. with the modified add/drop device of Nielsen et al., Milton et al., Scridhar and Koehler because providing extra-unused wavelength allows future growth to be achieved smoothly without interruption of service. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide extra unused wavelength channels initially, as suggested by Hutchison et al., in the modified add/drop device of Nielsen et al., Milton et al., Scridhar and Koehler because providing extra unused wavelength allows future growth to be achieved smoothly without interruption of service.

Regarding claim 34, Nielsen et al. teaches in col. 2, line 35 thin film filters and Milton et al. teaches in col. 6, lines 1-2 that a node includes receiver for converting optical signal to electrical signal.

Response to Arguments

12. Applicant's arguments filed 20 July 2005 have been fully considered but they are not persuasive.

Regarding the 35 U.S.C. 103 rejection based on Milton et al. and Farries, the Applicant states, "This 'band' of Farries clearly includes a plurality of wavelengths which define the band. For example, the Examiner notes that a 'band' may consist of multiple wavelengths, such as λ1-λ4 defining a band 'A' and λ5-λ8 defining a band B." The Applicant then argues, "In contrast, the present invention provides for the dropping of one or more of a select set of wavelengths from a multi-wavelength optical signal, wherein the select set contains only a portion of the wavelengths in the bands." The Applicant fails to point out the difference between Farries and the claimed invention because Farries teaches in FIG. 7 only dropping λ1 and λ4 from band A while λ2 and λ3 pass through. That is, Farries teaches dropping a portion (λ1 and λ4) of the wavelength in the band (λ1, λ2, λ3 and λ4). This reads on the claim limitation and the rejection is proper.

13. Applicant's other arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shi K. Li whose telephone number is 571 272-3031. The examiner can normally be reached on Monday-Friday (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

skl
27 November 2005

Shi K. Li

Shi K. Li
Patent Examiner